

Title (en)

NANOPARTICLE BASED INORGANIC BONDING MATERIAL

Title (de)

ANORGANISCHES BINDUNGSMATERIAL AUF NANOPARTIKEL-BASIS

Title (fr)

NANOPARTICULE À BASE DE MATÉRIAU DE LIAISON INORGANIQUE

Publication

**EP 2052418 A2 20090429 (EN)**

Application

**EP 07805312 A 20070806**

Priority

- IB 2007053084 W 20070806
- EP 06118564 A 20060808
- EP 07805312 A 20070806

Abstract (en)

[origin: WO2008018003A2] A method for the production of a light emitting device is provided, comprising providing at least one LED (10) and at least one optical element (13); arranging a bonding material (12), comprising a stable colloidal sol of inorganic metal oxide nanoparticles dispersed in a liquid medium, on a light emitting surface (11) of said at least one LED and/or on a surface of said at least one optical element (13); (c) placing said at least one optical element (13) on the light emitting surface (11) of said at least one LED (10) with said bonding material (12) there between to form at least one assembly; and curing said bonding material to form an inorganic bond. The bonding material may be cured at temperatures not detrimental to the LED, while the resulting bond is photo -thermally stable.

IPC 8 full level

**H01L 33/58** (2010.01); **H01L 33/44** (2010.01)

CPC (source: EP US)

**H01L 33/58** (2013.01 - EP US); **H01L 27/15** (2013.01 - US); **H01L 33/44** (2013.01 - EP US)

Citation (search report)

See references of WO 2008018003A2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK RS

DOCDB simple family (publication)

**WO 2008018003 A2 20080214**; **WO 2008018003 A3 20080410**; CN 101501872 A 20090805; CN 101501872 B 20120314; EP 2052418 A2 20090429; JP 2010500747 A 20100107; US 2010025706 A1 20100204

DOCDB simple family (application)

**IB 2007053084 W 20070806**; CN 200780029449 A 20070806; EP 07805312 A 20070806; JP 2009523407 A 20070806; US 37615907 A 20070806